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<120> Somatostatins and Methods

<130> 255.00040101

<140> US 09/727,739

<141> 2000-12-01

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<151> 1999-12-03

<160> 52

<170> PatentIn version 3.0

<210> 1

<211> 14

<212> PRT

<213> Homo sapiens

<400> 1

Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
1 5 10

<210> 2

<211> 14

<212> PRT

<213> Oncorhynchus mykiss

<400> 2

Ala Gly Cys Lys Asn Phe Tyr Trp Lys Gly Phe Thr Ser Cys  
1 5 10

<210> 3

<211> 114

<212> PRT

<213> Oncorhynchus mykiss

<400> 3

Met Leu Ser Thr Arg Val Gln Cys Ala Leu Ala Leu Leu Ser Leu Ala  
1 5 10 15

Leu Ala Ile Ser Ser Val Ser Ala Ala Pro Ser Asp Ala Lys Leu Arg  
20 25 30

Gln Leu Leu Gln Arg Ser Leu Met Ala Pro Ala Gly Lys Gln Glu Leu  
35 40 45

Ala Arg Asn Thr Leu Val Glu Leu Leu Ser Glu Leu Ala His Val Glu  
50 55 60

Asn Glu Ala Ile Glu Leu Asp Asp Met Ser His Gly Val Glu Gln Glu  
65 70 75 80

Asp Val Asp Leu Glu Leu Glu Arg Ala Pro Gly Pro Val Leu Ala Pro  
85 90 95

Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr  
100 105 110

Ser Cys

<210> 4

<211> 26

<212> PRT

<213> Oncorhynchus mykiss

<400> 4

Ala Pro Gly Pro Val Leu Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys  
1 5 10 15

Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
20 25

<210> 5

<211> 88

<212> PRT

<213> Oncorhynchus mykiss

<400> 5

Met Leu Ser Thr Arg Val Gln Cys Ala Leu Ala Leu Leu Ser Leu Ala  
1 5 10 15

Leu Ala Ile Ser Ser Val Ser Ala Ala Pro Ser Asp Ala Lys Leu Arg  
20 25 30

Gln Leu Leu Gln Arg Ser Leu Met Ala Pro Ala Gly Lys Gln Glu Leu  
35 40 45

Ala Arg Asn Thr Leu Val Glu Leu Leu Ser Glu Leu Ala His Val Glu  
50 55 60

Asn Glu Ala Ile Glu Leu Asp Asp Met Ser His Gly Val Glu Gln Glu  
65 70 75 80

Asp Val Asp Leu Glu Leu Glu Arg  
85

<210> 6

<211> 12

<212> PRT

<213> Oncorhynchus mykiss

<400> 6

Ala Pro Gly Pro Val Leu Ala Pro Arg Glu Arg Lys  
1 5 10

<210> 7

<211> 24

<212> PRT

<213> Oncorhynchus mykiss

<400> 7

Met Leu Ser Thr Arg Val Gln Cys Ala Leu Ala Leu Leu Ser Leu Ala  
1 5 10 15

Leu Ala Ile Ser Ser Val Ser Ala  
20

<210> 8

<211> 763

<212> DNA

<213> Oncorhynchus mykiss

<400> 8  
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gacgcgtgtc cagtgcgccc tagcactact ctccctagcc ctggccatca gcagcgtctc 180  
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agagaacgag gcgattgaat tggatgacat gtctcatggc gtggagcagg aggatgtgga 360  
tctcgagctg gagcgtgcac ccggcccagt actggctcca cgtgaacgca aggctggatg 420  
caagaacttc ttctggaaga cttttacatc gtgttaatga atctactcct ttactgtgtg 480  
tactacatct catctctttt gtttcaatca ctcatgtctg aatccaatgc accatggcct 540  
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tgtatgcggt tctgctttga ctgtgattta tgtattttgg cagactatct ttaattgttt 720  
gtttgaataa aatctgtgtt tcagaaccaa aaaaaaaaaa aaa 763

<210> 9

<211> 115

<212> PRT

<213> Oncorhynchus mykiss

<400> 9

Met Lys Val Cys Arg Ile His Cys Ala Leu Ala Leu Leu Gly Leu Ala 1 5 10 15  
Leu Ala Ile Cys Ser Gln Gly Ala Ala Ser Gln Pro Asp Leu Asp Leu 20 25 30  
Arg Ser Arg Arg Leu Leu Gln Arg Ala Arg Ala Ala Ala Leu Pro His 35 40 45  
Arg Ser Gly Val Ser Glu Arg Trp Arg Thr Phe Tyr Pro Asn Cys Pro 50 55 60  
Cys Leu Arg Pro Arg Lys Val Lys Cys Pro Ala Gly Ala Lys Glu Asp 65 70 75 80  
Leu Arg Val Glu Leu Glu Arg Ser Val Gly Asn Pro Asn Asn Leu Pro 85 90 95  
Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Tyr Trp Lys Gly Phe

100 105 110

Thr Ser Cys  
115

<210> 10

<211> 28

<212> PRT

<213> Oncorhynchus mykiss

<400> 10

Ser Val Gly Asn Pro Asn Asn Leu Pro Pro Arg Glu Arg Lys Ala Gly  
1 5 10 15

Cys Lys Asn Phe Tyr Trp Lys Gly Phe Thr Ser Cys  
20 25

<210> 11

<211> 87

<212> PRT

<213> Oncorhynchus mykiss

<400> 11

Met Lys Val Cys Arg Ile His Cys Ala Leu Ala Leu Leu Gly Leu Ala  
1 5 10 15

Leu Ala Ile Cys Ser Gln Gly Ala Ala Ser Gln Pro Asp Leu Asp Leu  
20 25 30

Arg Ser Arg Arg Leu Leu Gln Arg Ala Arg Ala Ala Ala Leu Pro His  
35 40 45

Arg Ser Gly Val Ser Glu Arg Trp Arg Thr Phe Tyr Pro Asn Cys Pro  
50 55 60

Cys Leu Arg Pro Arg Lys Val Lys Cys Pro Ala Gly Ala Lys Glu Asp  
65 70 75 80

Leu Arg Val Glu Leu Glu Arg  
85

<210> 12

<211> 14

<212> PRT

<213> Oncorhynchus mykiss

<400> 12

Ser Val Gly Asn Pro Asn Asn Leu Pro Pro Arg Glu Arg Lys  
 1 5 10

<210> 13

<211> 25

<212> PRT

<213> Oncorhynchus mykiss

<400> 13

Met Lys Val Cys Arg Ile His Cys Ala Leu Ala Leu Leu Gly Leu Ala  
 1 5 10 15

Leu Ala Ile Cys Ser Gln Gly Ala Ala  
 20 25

<210> 14

<211> 623

<212> DNA

<213> Oncorhynchus mykiss

<400> 14

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 aatccactgt gccctggccc tgctgggttt ggccctggcc atttgcagcc aaggagccgc 180  
 ctgcgagccc gacctggacc tccgcagccg cagactcctt cagagggtc gtgccgctgc 240  
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 cctgaggccc aggaaagtga agtgtcaagc gggggctaaa gaggacctgc gtgtggagct 360  
 ggagcgctca gtgggcaacc ccaacaacct tccccccgt gagcgcaaag ccggctgcaa 420  
 gaacttctac tggaagggtc tcacttctcg ctgagggaag aataaaccga ccacattatg 480  
 acatgacgct gccaatcacg tcacaccgcc aacttacacc tgacgaatgc agccaatcaa 540  
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<210> 15

<211> 111

<212> PRT

<213> Oncorhynchus mykiss

<400> 15

Met Arg Val Ser Gln Ile His Cys Ala Leu Ala Leu Leu Gly Leu Ala  
1 5 10 15  
Leu Ala Ile Cys Ser Gln Gly Ala Ala Ser Gln Pro Asp Leu Asp Leu  
20 25 30  
Ala Ser Arg Arg Leu Leu Gln Arg Ala Leu Ala Ala Ala Leu Pro His  
35 40 45  
Arg Ser Gly Val Ser Glu Arg Trp Arg Thr Phe Tyr Pro Asn Cys Pro  
50 55 60  
Cys Leu Arg Trp Arg Pro Arg Lys Val Lys Gly Pro Gln Leu Lys Ala  
65 70 75 80  
Lys Glu Asp Leu Glu Arg Ser Val Asp Asn Leu Pro Pro Arg Glu Arg  
85 90 95  
Lys Ala Gly Cys Lys Asn Phe Tyr Trp Lys Gly Phe Thr Ser Cys  
100 105 110

<210> 16

<211> 25

<212> PRT

<213> Oncorhynchus mykiss

<400> 16

Ser Val Asp Asn Leu Pro Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn  
1 5 10 15  
Phe Tyr Trp Lys Gly Phe Thr Ser Cys  
20 25

<210> 17

<211> 86

<212> PRT

<213> Oncorhynchus mykiss

<400> 17

Met Arg Val Ser Gln Ile His Cys Ala Leu Ala Leu Leu Gly Leu Ala  
1 5 10 15  
Leu Ala Ile Cys Ser Gln Gly Ala Ala Ser Gln Pro Asp Leu Asp Leu  
20 25 30  
Ala Ser Arg Arg Leu Leu Gln Arg Ala Leu Ala Ala Ala Leu Pro His  
35 40 45

Arg Ser Gly Val Ser Glu Arg Trp Arg Thr Phe Tyr Pro Asn Cys Pro  
50 55 60

Cys Leu Arg Trp Arg Pro Arg Lys Val Lys Gly Pro Gln Leu Lys Ala  
65 70 75 80

Lys Glu Asp Leu Glu Arg  
85

<210> 18

<211> 11

<212> PRT

<213> Oncorhynchus mykiss

<400> 18

Ser Val Asp Asn Leu Pro Pro Arg Glu Arg Lys  
1 5 10

<210> 19

<211> 25

<212> PRT

<213> Oncorhynchus mykiss

<400> 19

Met Arg Val Ser Gln Ile His Cys Ala Leu Ala Leu Leu Gly Leu Ala  
1 5 10 15

Leu Ala Ile Cys Ser Gln Gly Ala Ala  
20 25

<210> 20

<211> 600

<212> DNA

<213> Oncorhynchus mykiss

<400> 20

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actgtgcact ggccctgctg ggtctggccc tggcaatttg cagccaagga gccgcctcgc	180
agccagacct ggacctgcg agccgccgac tcctccagag ggccctggcc gctgcattgc	240
cacacaggag tggagtaagc gagcgatgga ggacattcta tccgaactgt ccttgccctga	300
ggtggaggcc cagaaaagtg aagggccac agctgaaggc caaagaggac ctggagcgct	360

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cagtggacaa ctttcccccc cgcgagcgca aagctggctg caagaacttc tactggaagg 420  
gattcacttc ttgctaaggg aagaaaagcc tgaccacctt atgacacaat gcattcaatc 480  
acatcacacc gccaaccttc atctgactaa tgtagccaat cagcaattag ctgtgcctga 540  
tgacaattat gattatgatg tacctgacta atttagaaat aaagagaaat aaagagaaac 600

<210> 21

<211> 28

<212> PRT

<213> Homo sapiens

<400> 21

Ser Ala Asn Ser Asn Pro Ala Met Ala Pro Arg Glu Arg Lys Ala Gly  
1 5 10 15

Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
20 25

<210> 22

<211> 37

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 22  
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<210> 23

<211> 32

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 23  
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<210> 24  
<211> 48  
<212> DNA  
<213> Artificial

<220>  
<223> Primer  
<220>  
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<223> i

<220>  
<221> modified\_base  
<222> (41)..(42)  
<223> i

<220>  
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<222> (46)..(47)  
<223> i

<400> 24  
cuacuacuac uaggccacgc gtcgactagt acgggnnggg nngggngg

48

<210> 25  
<211> 20  
<212> DNA  
<213> Artificial

<220>  
<223> Primer  
<400> 25  
aagaacttct tctggaagac

20

<210> 26  
<211> 20  
<212> DNA  
<213> Artificial

<220>

<223> Primer

<400> 26  
attcattaac acgatgtaaa

20

<210> 27  
<211> 33  
<212> PRT  
<213> Myxine glutinosa

<400> 27

Ala Val Glu Arg Pro Arg Gln Asp Gly Gln Val His Glu Pro Pro Gly  
1 5 10 15  
Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr  
20 25 30

Ser

<210> 28  
<211> 14  
<212> PRT  
<213> Hydrolagus collei

<400> 28

Ala Gly Cys Lys Ser Phe Phe Trp Lys Thr Phe Thr Ser Cys  
1 5 10

<210> 29  
<211> 26  
<212> PRT  
<213> Amia calva

<400> 29

Ser Ala Asn Pro Ala Leu Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys  
1 5 10 15

Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
20 25

<210> 30

<211> 14

<212> PRT

<213> Acipenser gueldenstaedti

<400> 30

Ala Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
1 5 10

<210> 31

<211> 28

<212> PRT

<213> Lophius americanus

<400> 31

Ala Ala Ser Gly Gly Pro Leu Leu Ala Pro Arg Glu Arg Lys Ala Gly  
1 5 10 15

Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
20 25

<210> 32

<211> 28

<212> PRT

<213> Sus scrofa

<400> 32

Ser Ala Asn Ser Asn Pro Ala Met Ala Pro Arg Glu Arg Lys Ala Gly  
1 5 10 15

Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
20 25

<210> 33

<211> 21

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 33

ggctgcaaga atttcttctc g

21

<210> 34

<211> 21

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 34

gttggcgggtg tgacgtgatt g

21

<210> 35

<400> 35  
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<210> 36

<211> 105

<212> PRT

<213> Ictalrus punctatus

<400> 36

Met Ser Ser Ser Pro Leu Arg Leu Ala Leu Ala Leu Met Cys Leu Val  
1 5 10 15

Ser Ala Val Gly Val Ile Ser Cys Gly Arg Pro His Val Val Leu Asn  
20 25 30

Ser Ala Leu Glu Glu Ala Arg Asn Val Pro Phe Gly Glu Glu Val Pro  
35 40 45

Glu Arg Leu Thr Leu Pro Glu Leu Gln Trp Met Leu Ser Asn Asn Glu  
50 55 60

Leu Thr Pro Val Gln Val Glu Glu Ala Pro Arg Ser Arg Leu Glu Leu  
65 70 75 80

D1  
Cont

Val Arg Arg Asp Asn Thr Val Thr Ser Lys Pro Leu Asn Cys Met Asn  
85 90 95

Tyr Phe Trp Lys Ser Arg Thr Ala Cys  
100 105

<210> 37

<211> 125

<212> PRT

<213> Lophius americanus

<400> 37

Met Gln Cys Ile Arg Cys Pro Ala Ile Leu Ala Leu Leu Ala Leu Val  
1 5 10 15

Leu Cys Gly Pro Ser Val Ser Ser Gln Leu Asp Arg Glu Gln Ser Asp  
20 25 30

Asn Gln Asp Leu Asp Leu Glu Leu Arg Gln His Trp Leu Leu Glu Arg  
35 40 45

Ala Arg Ser Ala Gly Leu Leu Ser Gln Glu Trp Ser Lys Arg Ala Val  
50 55 60

Glu Glu Leu Leu Ala Gln Met Ser Leu Pro Glu Ala Thr Phe Gln Arg  
65 70 75 80

Glu Ala Glu Asp Ala Ser Met Ala Thr Glu Gly Arg Met Asn Leu Glu  
85 90 95

Arg Ser Val Asp Ser Thr Asn Asn Leu Pro Pro Arg Glu Arg Lys Ala  
100 105 110

Gly Cys Lys Asn Phe Tyr Trp Lys Gly Phe Thr Ser Cys  
115 120 125

<210> 38

<211> 120

<212> PRT

<213> Carasius auratus

<400> 38

Met Arg Leu Cys Glu Leu His Cys Tyr Leu Ala Leu Leu Gly Leu Ser  
1 5 10 15

Leu Val Leu Cys Gly Arg Cys Ala Asn Ser Gln Leu Glu Pro Asp Leu  
20 25 30

Asp Phe Arg His His Arg Leu Leu Gln Arg Ala Ser Ala Thr Gly Gln  
35 40 45

Ala Thr Gln Asp Phe Thr Lys Arg Asp Val Glu Lys Leu Leu Ser Leu  
 50 55 60  
 Leu Ser Ile Pro Glu Met Glu Met Arg Glu Lys Gly Leu Ser Met Ala  
 65 70 75 80  
 Gly Glu Ser Glu Asp Leu Arg Leu Glu Gln Glu Arg Ser Ala Glu Ser  
 85 90 95  
 Ser Asn Gln Leu Pro Thr Arg Val Arg Lys Glu Gly Cys Lys Asn Phe  
 100 105 110  
 Tyr Trp Lys Gly Phe Thr Ser Cys  
 115 120

<210> 39

<211> 111

<212> PRT

<213> Carasius auratus

<400> 39

Met Gln Leu Leu Ser Ser Leu Val Ser Leu Leu Leu Val Leu Tyr Ser  
 1 5 10 15  
 Val Arg Ala Ala Ala Val Leu Pro Val Glu Glu Arg Asn Pro Ala Gln  
 20 25 30  
 Ser Arg Glu Leu Ser Lys Glu Arg Lys Glu Leu Ile Leu Lys Leu Ile  
 35 40 45  
 Ser Gly Leu Leu Asp Gly Val Asp Asn Ser Val Leu Asp Gly Glu Ile  
 50 55 60  
 Ala Pro Val Pro Phe Asp Ala Glu Glu Pro Leu Glu Ser Arg Leu Glu  
 65 70 75 80  
 Glu Arg Ala Val Tyr Asn Arg Leu Ser Gln Leu Pro Gln Arg Asp Arg  
 85 90 95  
 Lys Ala Pro Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys  
 100 105 110

<210> 40

<211> 103

<212> PRT

<213> Rana ridibunda

<400> 40

Met Leu Gly Ser Ala Gly Thr Leu Leu Leu Leu Leu Ala Trp Gly  
 1 5 10 15  
 Ala Arg Ala Leu Ser Gln Pro Asp Asp Asn Arg Ile Thr Thr Gly Arg

20 25 30  
 Asn Gln Asp Leu Asn Ala Ile Gln Gln Asp Leu Leu Leu Lys Leu Leu  
 35 40 45  
 Ser Gly Trp Thr Asp Ser Arg Glu Ser Asn Leu Val Glu Val Glu Arg  
 50 55 60  
 Asn Val Pro Asp Pro Pro Glu Pro Lys Ile Pro Pro Ser Val Lys Phe  
 65 70 75 80  
 Pro Arg Leu Ser Leu Arg Glu Arg Lys Ala Pro Cys Lys Asn Phe Phe  
 85 90 95  
 Trp Lys Thr Phe Thr Met Cys  
 100

<210> 41  
 <211> 114  
 <212> PRT  
 <213> Ictalurus punctatus

<400> 41  
 Met Pro Ser Thr Arg Ile Gln Cys Ala Leu Ala Leu Leu Ala Val Ala  
 1 5 10 15  
 Leu Ser Val Cys Ser Val Ser Gly Ala Pro Ser Asp Ala Lys Leu Arg  
 20 25 30  
 Gln Phe Leu Gln Arg Ser Ile Leu Ala Pro Ser Val Lys Gln Glu Leu  
 35 40 45  
 Thr Arg Tyr Thr Leu Ala Glu Leu Leu Ala Glu Leu Ala Glu Ala Glu  
 50 55 60  
 Asn Glu Val Leu Asp Ser Asp Glu Val Ser Arg Ala Ala Glu Ser Glu  
 65 70 75 80  
 Gly Ala Arg Leu Glu Met Glu Arg Ala Ala Gly Pro Met Leu Ala Pro  
 85 90 95  
 Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr  
 100 105 110  
 Ser Cys

<210> 42  
 <211> 121  
 <212> PRT  
 <213> Lophius americanus

<400> 42



Met Lys Met Val Ser Ser Ser Arg Leu Arg Cys Leu Leu Val Leu Leu  
1 5 10 15  
Leu Ser Leu Thr Ala Ser Ile Ser Cys Ser Phe Ala Gly Gln Arg Asp  
20 25 30  
Ser Lys Leu Arg Leu Leu Leu His Arg Tyr Pro Leu Gln Gly Ser Lys  
35 40 45  
Gln Asp Met Thr Arg Ser Ala Leu Ala Glu Leu Leu Ser Asp Leu  
50 55 60  
Leu Gln Gly Glu Asn Glu Ala Leu Glu Glu Glu Asn Phe Pro Leu Ala  
65 70 75 80  
Glu Gly Gly Pro Glu Asp Ala His Ala Asp Leu Glu Arg Ala Ala Ser  
85 90 95  
Gly Gly Pro Leu Leu Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn  
100 105 110  
Phe Phe Trp Lys Thr Phe Thr Ser Cys  
115 120

<210> 43

<211> 114

<212> PRT

<213> Carasius auratus

<400> 43

Met Leu Ser Thr Arg Ile Gln Cys Ala Leu Ala Leu Leu Ser Leu Ala  
1 5 10 15  
Leu Ala Val Cys Ser Val Ser Ala Ala Pro Thr Asp Ala Lys Leu Arg  
20 25 30  
Gln Leu Leu Gln Arg Ser Leu Leu Asn Pro Ala Gly Lys Gln Glu Leu  
35 40 45  
Ala Arg Tyr Thr Leu Ala Asp Leu Leu Ser Glu Leu Val Gln Ala Glu  
50 55 60  
Asn Glu Ala Leu Glu Pro Glu Asp Leu Ser Arg Ala Val Glu Lys Asp  
65 70 75 80  
Glu Val Arg Leu Glu Leu Glu Arg Ala Ala Gly Pro Met Leu Ala Pro  
85 90 95  
Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr  
100 105 110  
Ser Cys

<210> 44

<211> 115

<212> PRT

<213> Rana ridibunda

<400> 44

Met Gln Ser Cys Arg Val Gln Cys Ala Leu Thr Leu Leu Ser Leu Ala  
1 5 10 15  
Leu Ala Ile Asn Ser Ile Ser Ala Ala Pro Thr Asp Pro Arg Leu Arg  
20 25 30  
Gln Phe Leu Gln Lys Ser Leu Ala Ser Ala Gly Lys Gln Glu Leu Ala  
35 40 45  
Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Ser Gln Thr Asp Asn  
50 55 60  
Glu Ala Leu Glu Ser Asp Asp Leu Pro Arg Gly Ala Glu Gln Asp Glu  
65 70 75 80  
Val Arg Leu Glu Leu Glu Arg Ser Ala Asn Ser Ser Pro Ala Leu Ala  
85 90 95  
Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe  
100 105 110  
Thr Ser Cys  
115

<210> 45

<211> 116

<212> PRT

<213> Gallus gallus

<400> 45

Met Leu Ser Cys Arg Leu Gln Cys Ala Leu Ala Leu Leu Ser Ile Ala  
1 5 10 15  
Leu Ala Val Gly Thr Val Ser Ala Ala Pro Ser Asp Pro Arg Leu Arg  
20 25 30  
Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Ala Gly Lys Gln Glu Leu  
35 40 45  
Ala Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Ser Gln Thr Glu  
50 55 60  
Asn Glu Ala Leu Glu Ser Glu Asp Leu Ser Arg Gly Ala Glu Gln Asp  
65 70 75 80  
Glu Val Arg Leu Glu Leu Glu Arg Ser Ala Asn Ser Asn Pro Ala Leu  
85 90 95  
Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr

100 105 110

phe Thr Ser Cys  
115

<210> 46

<211> 116

<212> PRT

<213> Rattus norvegicus

<400> 46

Met Leu Ser Cys Arg Leu Gln Cys Ala Leu Ala Ala Leu Cys Ile Val  
1 5 10 15

Leu Ala Leu Gly Gly Val Thr Gly Ala Pro Ser Asp Pro Arg Leu Arg  
20 25 30

Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Thr Gly Lys Gln Glu Leu  
35 40 45

Ala Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Asn Gln Thr Glu  
50 55 60

Asn Asp Ala Leu Glu Pro Glu Asp Leu Pro Gln Ala Ala Glu Gln Asp  
65 70 75 80

Glu Met Arg Leu Glu Leu Gln Arg Ser Ala Asn Ser Asn Pro Ala Met  
85 90 95

Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr  
100 105 110

phe Thr Ser Cys  
115

<210> 47

<211> 116

<212> PRT

<213> Bos taurus

<400> 47

Met Leu Ser Cys Arg Leu Gln Cys Ala Leu Ala Ala Leu Ser Ile Val  
1 5 10 15

Leu Ala Leu Gly Gly Val Thr Gly Ala Pro Ser Asp Pro Arg Leu Arg  
20 25 30

Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Ala Gly Lys Gln Glu Leu  
35 40 45

Ala Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Asn Gln Thr Glu  
50 55 60

Ile Asp Ala Leu Glu Pro Glu Asp Leu Ser Gln Ala Ala Glu Gln Asp  
65 70 75 80

Glu Met Arg Leu Glu Leu Gln Arg Ser Ala Asn Ser Asn Pro Ala Met  
85 90 95

Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr  
100 105 110

Phe Thr Ser Cys  
115

<210> 48

<211> 116

<212> PRT

<213> Macaca fascicularis

<400> 48

Met Leu Ser Cys Arg Leu Gln Cys Ala Leu Ala Ala Leu Ser Ile Val  
1 5 10 15

Leu Ala Leu Gly Cys Val Thr Gly Ala Pro Ser Asp Pro Arg Leu Arg  
20 25 30

Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Ala Gly Lys Gln Glu Leu  
35 40 45

Ala Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Asn Gln Thr Glu  
50 55 60

Asn Asp Ala Leu Glu Pro Glu Asp Leu Ser Gln Ala Ala Glu Gln Asp  
65 70 75 80

Glu Met Arg Leu Glu Leu Gln Arg Ser Ala Asn Ser Asn Pro Ala Met  
85 90 95

Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr  
100 105 110

Phe Thr Ser Cys  
115

<210> 49

<211> 116

<212> PRT

<213> Homo sapiens

<400> 49

Met Leu Ser Cys Arg Leu Gln Cys Ala Leu Ala Ala Leu Ser Ile Val  
1 5 10 15

Leu Ala Leu Gly Cys Val Thr Gly Ala Pro Ser Asp Pro Arg Leu Arg  
                   20                  25                  30  
 Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Ala Gly Lys Gln Glu Leu  
                   35                  40                  45  
 Ala Lys Tyr Phe Leu Ala Glu Leu Leu Ser Glu Pro Asn Gln Thr Glu  
                   50                  55                  60  
 Asn Asp Ala Leu Glu Pro Glu Asp Leu Ser Gln Ala Ala Glu Gln Asp  
                   65                  70                  75                  80  
 Glu Met Arg Leu Glu Leu Gln Arg Ser Ala Asn Ser Asn Pro Ala Met  
                   85                  90                  95  
 Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr  
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